

CLAIMS

What is claimed is:

1. A surface light source device, comprising:
a transparent light guide plate ;
at least a light source for emitting light, positioned adjacent to a corresponding edge surface of the light guide plate; and
at least a light source holder for fixing the light source ;
wherein, the at least a light source holder and the light guide plate combine into one assembly.
2. The surface light source device as described in claim 1, wherein the at least a light source holder is made of silicon rubber.
3. The surface light source device as described in claim 1, wherein the at least a light source holder is integrated with the light guide plate by an injection-molding process.
4. The surface light source device as described in claim 1, wherein the at least a light source holder is attached to the light guide plate.
5. The surface light source device as described in claim 1, wherein a light source holder is provided at each corner of the light guide plate.
6. The surface light source device as described in claim 1, further comprising at least a reflector coupling with at least a light source holder and enclosing a corresponding light source on three sides.
7. The surface light source device as described in claim 6, wherein the reflector has at least a protrusion for engaging with at least an edge of at least one of the corresponding light source holders.

8. The surface light source device as described in claim 6, wherein the reflector is attached to the corresponding light source holders using screws or by bonding.
9. The surface light source device as described in claim 1, wherein the at least a light source holder has a hole for receiving an end of the at least a light source.
10. The surface light source device as described in claim 9, wherein a heat insulated spacer is installed between an inner surface of each hole and a corresponding end of the corresponding light source, and an inner diameter of the heat insulated spacer is slightly greater than a diameter of the end of the light source, and a diameter of the hole is slightly greater than an outer diameter of the heat insulated spacer.
11. A surface light source device, comprising:
 - a transparent light guide plate ;
 - at least a light source for emitting light, positioned adjacent to a corresponding edge surface of the light guide plate; and
 - at least a light source holder for fixing the light source ;wherein, the at least a light source holder is integrally formed with the light guide plate by an injection-molding process.
12. The surface light source device as described in claim 11, wherein the at least a light source holder is made of silicon rubber.
13. The surface light source device as described in claim 11, wherein a light source holder is provided at each corner of the light guide plate.
14. The surface light source device as described in claim 13, wherein each light source holder has a hole for receiving a corresponding end of a corresponding light source.

15. The surface light source device as described in claim 14, wherein a heat insulated spacer is installed between an inner surface of each hole and a corresponding end of the corresponding light source, and an inner diameter of the heat insulated spacer is slightly greater than a diameter of the end of the light source, and a diameter of the hole is slightly greater than an outer diameter of the heat insulated spacer.
16. The surface light source device as described in claim 11, further comprising at least a reflector coupling with at least a light source holder and enclosing a corresponding light source on three sides.
17. The surface light source device as described in claim 16, wherein the reflector has at least a protrusion for engaging with at least an edge of at least one of the corresponding light source holders.
18. The surface light source device as described in claim 16, wherein the reflector is attached to the corresponding light source holders using screws or by bonding.
19. A method of making a liquid crystal display, comprising steps of:
via a single injection-molding process, forming a transparent light guide plate with at least one light source holder integrally extending on an edge section of said light guide plate, wherein said light source holder defines a through hole along a lengthwise direction of said edge section; and
inserting a tubular type light source into the through hole along said lengthwise direction.
20. The method as described in claim 19, further including a steps of assembling a reflector unto the light source holder opposite to said edge section and

enclosing said light source.